

Notice of Allowability

Application No.

10/627,584

Applicant(s)

POLING ET AL.

Examiner

Jonas N. Strickland

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the response to the election of claims 1-13 on 12/04.
2. ☒ The allowed claim(s) is/are claims 1-13.
3. ☒ The drawings filed on 25 July 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 7/04, 3/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Barbara J. Clark on 3/21/05.

2. The application has been amended as follows:

- Claims 14-17 have been cancelled.

3. The following is an examiner's statement of reasons for allowance: The instantly claimed invention is allowable over the cited prior art, because the cited prior art fails to disclose a compound comprising: $H_xCs_{(4-x)}Ge_4S_{10}yH_2S \cdot zH_2O$, $H_xRb_{(4-x)}Ge_4S_{10} \cdot zH_2O$, or $H_xK_{(4-x)}Ge_4S_{10} \cdot zH_2O$, wherein

$$0 < x \leq 4; 0 \leq y \leq 1; \text{ and } z \geq 0.$$

Bedard et al. (US Patent 5,839,427) discloses a metallochalcogenide microporous composition having metal-metal bonds. The invention relates to dimetal sulfide compositions. The composition may also be comprised of germanium, as well as have an adamantane anionic species, such as Ge_4S_{10} (col. 2, lines 65-67). However, the compound as taught by Bedard et al. does not teach wherein hydrogen is present within the compound, but rather ammonium ions (col. 3, lines 11-34).

Kanatzids et al. (US Patent 5618471) discloses alkali metal quaternary chalcogenides which may include germanium, as well as sulfur (see abstract).

Art Unit: 1754

However, Kanatzids et al. does not disclose a compound comprising: $H_xCs_{(4-x)}Ge_4S_{10}yH_2S \cdot zH_2O$, $H_xRb_{(4-x)}Ge_4S_{10} \cdot zH_2O$, or $H_xK_{(4-x)}Ge_4S_{10} \cdot zH_2O$.

Susman et al. (US Patent 4,542,108) discloses glass formers comprised of germanium and sulfur having the formula GeS_2 (see abstract). However, Susman et al. fails to disclose a compound comprising: $H_xCs_{(4-x)}Ge_4S_{10}yH_2S \cdot zH_2O$, $H_xRb_{(4-x)}Ge_4S_{10} \cdot zH_2O$, or $H_xK_{(4-x)}Ge_4S_{10} \cdot zH_2O$.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent 4880761; US Patent 5531936; US Patent 4199357; US Patent 3962141; US Patent 3771073.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonas N. Strickland whose telephone number is 571-272-1359. The examiner can normally be reached on M-TH, 7:30-5:00, off 1st Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1754

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jonas N. Strickland
March 21, 2005



STANLEY S. SILVERMAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700